



## Oregon's Plan for Mitigating Earthquakes

### Full Mitigation Best Practice Story

#### State-wide, Oregon



**The State of Oregon** - The Cascadia Subduction Zone Fault is a long sloping fault located off the West coast of the United States which stretches from mid-Vancouver to Northern California. As a result of its enormous size, this fault is capable of producing devastating earthquakes. Geologic evidence suggests eighteen prehistoric earthquakes along this fault. The last earthquake produced by this fault was in 1700, and as a result of pressure build up, it is expected to produce a quake as large as a 9.0 on the Richter scale (the most recent quake of that magnitude caused the devastating tsunami in the Indian Ocean on December 26, 2004). This inevitable future disaster puts thousands of lives at risk, not to mention the critical infrastructure and buildings, many of which were built before today's building codes were put into effect.

In order to mitigate such a disaster, Oregon has recently developed earthquake safety policies to help address this seismic problem on the community level. Nearly three-quarters of the primary and secondary schools in Oregon were built before the first statewide building codes were enacted in 1974 and nearly twenty years before the most modern codes were put into effect in 1993. In order to bring the almost 1,600 at-risk schools up to code, the state Senate passed bills in 2001 requiring public schools to meet life safety standards by 2022, and emergency facilities, such as hospitals and fire stations, meet these standards by 2032. A project of this magnitude would consume many resources and to aid in paying for the renovations, voters passed ballot measures allowing for general obligation (GO) bonds to pay for earthquake mitigation projects.

Though Oregon's policy makers and citizens had set goals for mitigating seismic damage, and even developed ways to fund the project, there was no plan for making sure those set goals were met. In 2004, with the help of funds from the Federal Emergency Management Agency, the GO Bond task force was formed. As its first plan of action, the task force intends to complete a statewide needs assessment by early 2007, which would include schools (K-12), community colleges, fire stations, police stations, emergency operations centers, and acute-care hospitals. Upon completion of the assessments, a temporary committee will be formed to establish a grant program to distribute the earthquake rehabilitation grant funds.

With the help of Senator Peter Courtney, the recommendations of the GO Task Force were developed into Senate bills that were subsequently passed into law. These laws are designed to form a state grant program to distribute nearly \$1.2 billion of bond funds as determined by the needs assessment.

While creating new public policies can be an incredibly difficult task, such policies can be very effective in moving towards a statewide goal such as seismic safety. The recent success that Oregon has had with the development of popular public policies can be used as a framework in other states to aid in disaster mitigation.

#### Activity/Project Location

Geographical Area: **State-wide**

FEMA Region: **Region X**

State: **Oregon**

### Key Activity/Project Information

Sector: **Public**  
Hazard Type: **Earthquake**  
Activity/Project Type: **Building Codes; Mitigation Planning/Disaster Resistant Universities**  
Activity/Project Start Date: **11/2001**  
Activity/Project End Date: **Ongoing**  
Funding Source: **Local Sources**

### Activity/Project Economic Analysis

Cost: **Amount Not Available**

### Activity/Project Disaster Information

Mitigation Resulted From Federal  
Disaster? **Unknown**  
Value Tested By Disaster? **Unknown**  
Repetitive Loss Property? **Unknown**

### Reference URLs

No URLs were submitted

### Main Points

- The Cascadia Subduction Zone Fault is a long sloping fault located off the West coast of the United States which stretches from mid-Vancouver to Northern California.
- A large scale earthquake occurring from this fault is imminent
- In order to mitigate such a disaster, Oregon has recently developed earthquake safety policies to help address this seismic problem on the community level.
- In order to bring the almost 1,600 at-risk schools up to code, the state Senate passed bills in 2001 requiring public schools to meet life safety standards by 2022, and emergency facilities, such as hospitals and fire stations, meet these standards by 2032.
- Voters passed ballot measures allowing for general obligation (GO) bonds to pay for earthquake mitigation projects.